

HEALTH INFORMATION
TECHNOLOGY (HIT)
SIM STEERING COMMITTEE
SEPT. 18, 2014

Minakshi Tikoo, PhD, MBI, MS, MSc
Director, Business Intelligence & Shared Analytics
HHS HIT Coordinator

Overview

2

- HIT Logic Model for SIM
- Current HIT Projects and Assets
- Current HIT Landscape
- Proposed HIT Projects

Input/Resources

Activities
HIT Council
Other SIM workgroups
Meetings with Stakeholders

Outputs
Short-term
Long-term Outcome

Current Assets (in process/production)
Provider Directory
Enterprise Master Patient Index
Direct Health Information Service Provider
All payers claims data
Integrated Eligibility System
Care Analyzer (risk stratification tool used by Medicaid Medical ASO)

Proposed Assets
eCQMs reporting engine
Consent Registry
Disease Registries
Alert/notification Engine
Personal Health Record



HIT Interventions

Person-level
Personal Health Records/Patient portal to provide patient access to EHRs (Use Blue Button)
Self-management programs
Use of mobile technology

System level
Identifying High-risk population using LACE Index/care analyzer
Predicting readmissions using disease specific algorithms
Monitoring system health through Performance Measures
Data mining to identify patterns

Provider Level
Alert Notification
Community Support Resources
Medication Reconciliation
Care Coordination - Use of Secure messaging for document transport (Direct message)



Outputs
Increased capacity to process data
Increased capacity to analyze integrated data
Use of Standards for exchange of information
Use of standard terminologies and vocabularies
Harmonized systems and procedures

Outcomes
Published Results based on the domains and quality measures selected to demonstrate value. For example
Reduction in Hosp. readmission
Reduction in maternal depression
Increased Diabetes control
Enhanced rate of age-appropriate screenings

Impact
Improvement in 2020 Population Health indicators
Lower per capita costs

4 Current Projects and Assets

Current Assets (in process/production)

5

- Provider Directory (in staging at BEST)
- Enterprise Master Patient Index (part of IE)
- CMS EHR Incentive Program
 - ▣ Direct Health Information Service Provider
 - ▣ Core and Menu Measures
 - ▣ E Clinical Quality Measures (eCQMs)
- Care Analyzer (risk stratification tool used by Medicaid Medical ASO)
- All payers claims data
- Integrated Eligibility System
- Enterprise assessment work done by KPMG

EHR Incentive Programs

State/Territory	Program Type	Unique Count of EPs	Unique Count of HOSPITALS
Connecticut	Medicaid	1,723	1
	Medicare	3,701	1
	Medicare/Medicaid		27
Connecticut		5,424	29

State / Territory	MEDICARE		MEDICAID		TOTAL	
	Paid Count	Payment Amt	Paid Count	Payment Amt	Paid Count	Payment Amt
Alabama	6,821	\$ 319,362,129.25	2,245	\$ 138,365,906.00	9,066	\$ 457,728,035.25
Alaska	427	\$ 16,705,794.31	773	\$ 33,156,323.00	1,200	\$ 49,862,117.31
Arizona	7,780	\$ 243,723,133.33	3,279	\$ 176,516,076.99	11,059	\$ 420,239,210.32
Arkansas	3,544	\$ 189,741,617.32	2,093	\$ 71,966,781.49	5,637	\$ 261,708,398.81
California	36,585	\$ 1,164,351,286.37	20,268	\$ 929,036,989.69	56,853	\$ 2,093,388,276.06
Colorado	7,608	\$ 229,097,131.05	2,581	\$ 106,829,515.00	10,189	\$ 335,926,646.05
Connecticut	6,493	\$ 189,138,138.52	2,276	\$ 76,040,095.40	8,769	\$ 265,178,233.92

http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Downloads/July2014_RegistrationsUniqueCtProvidersbyState.pdf - Downloaded 9/18/2014 (data represented from January 2011 to July 2014)

Medicare EHR Incentive Payments

7

State / Territory	MEDICARE			
	Program Type	Provider Type	Count	Amount
Alabama	Medicare	EP	6,658	\$ 93,579,656.11
	Medicare	Hospital	4	\$ 7,738,884.41
	Medicare/Medicaid	Hospital	159	\$ 218,043,588.73
Alabama			6,821	\$ 319,362,129.25
Alaska	Medicare	EP	412	\$ 5,644,705.81
	Medicare	Hospital	0	\$ -
	Medicare/Medicaid	Hospital	15	\$ 11,061,088.50
Alaska			427	\$ 16,705,794.31
Arizona	Medicare	EP	7,680	\$ 106,406,624.83
	Medicare	Hospital	1	\$ 1,050,694.48
	Medicare/Medicaid	Hospital	99	\$ 136,265,814.02
Arizona			7,780	\$ 243,723,133.33
Arkansas	Medicare	EP	3,421	\$ 47,622,945.37
	Medicare	Hospital	9	\$ 14,230,486.79
	Medicare/Medicaid	Hospital	114	\$ 127,888,185.16
Arkansas			3,544	\$ 189,741,617.32
California	Medicare	EP	36,090	\$ 484,623,393.15
	Medicare	Hospital	107	\$ 145,543,862.39
	Medicare/Medicaid	Hospital	388	\$ 534,184,030.83
California			36,585	\$ 1,164,351,286.37
Colorado	Medicare	EP	7,481	\$ 99,554,068.22
	Medicare	Hospital	10	\$ 10,751,143.79
	Medicare/Medicaid	Hospital	117	\$ 118,791,919.04
Colorado			7,608	\$ 229,097,131.05
Connecticut	Medicare	EP	6,441	\$ 88,540,775.76
	Medicare	Hospital	2	\$ 1,834,381.00
	Medicare/Medicaid	Hospital	50	\$ 98,762,981.76
Connecticut			6,493	\$ 189,138,138.52

Medicaid EHR Incentive Payments

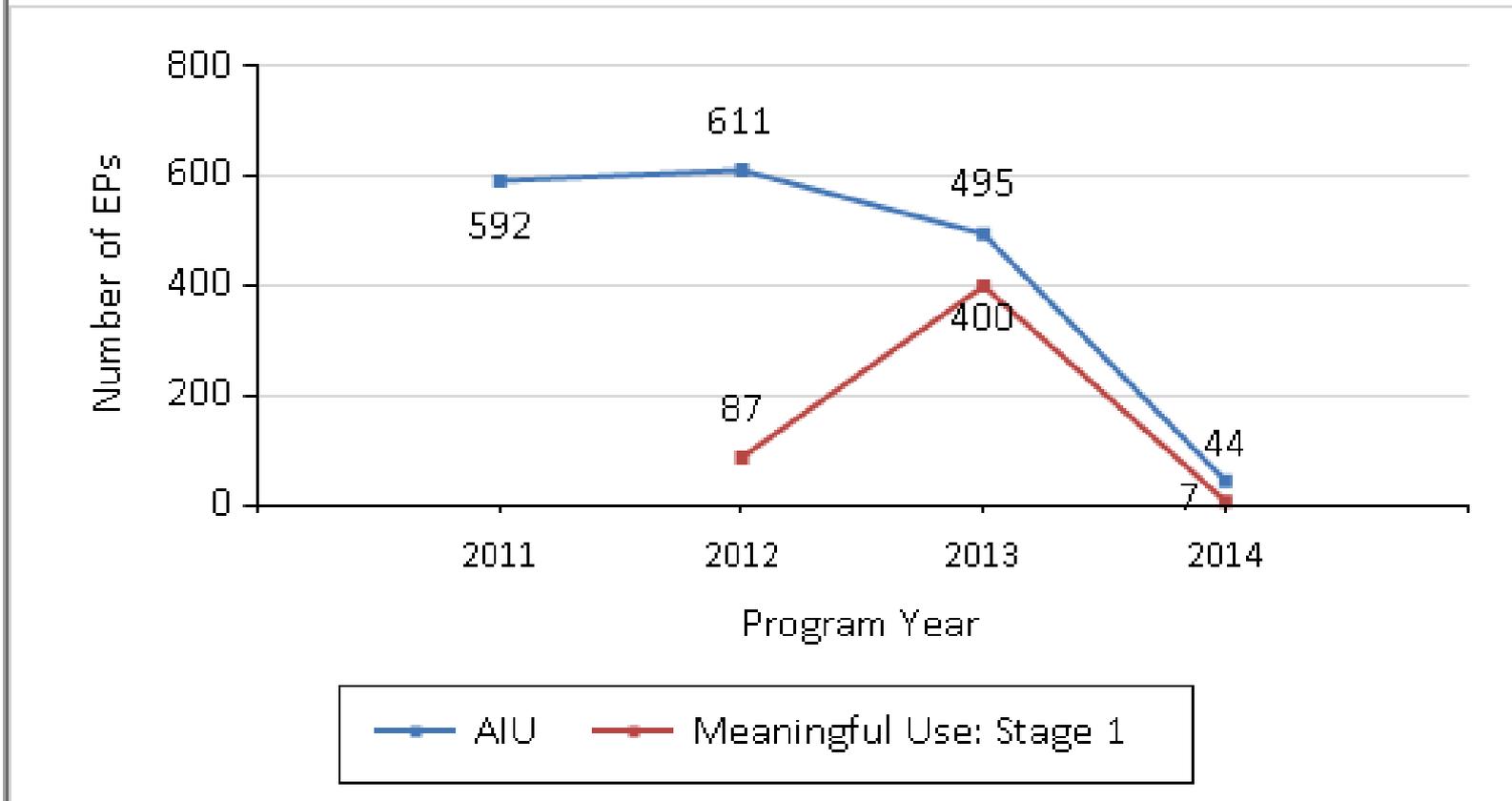
8

MEDICAID							TOTAL		
Program Type	Provider Type	AIU Count	AIU Amount	MU Count	MU Amount	Total Count	Total Amount	Count	Amount
Medicaid	EP	1,558	\$ 32,817,097.00	494	\$ 4,193,340.00	2,052	\$ 37,010,437.00	8,710	\$ 130,590,093.11
Medicaid	Hospital	2	\$ 6,719,312.00			2	\$ 6,719,312.00	6	\$ 14,458,196.41
Medicare/Medicaid	Hospital	86	\$ 56,196,935.00	105	\$ 38,439,222.00	191	\$ 94,636,157.00	350	\$ 312,679,745.73
		1,646	\$ 95,733,344.00	599	\$ 42,632,562.00	2,245	\$ 138,365,906.00	9,066	\$ 457,728,035.25
Medicaid	EP	580	\$ 12,282,502.00	158	\$ 1,334,501.00	738	\$ 13,617,003.00	1,150	\$ 19,261,708.81
Medicaid	Hospital			2	\$ 1,272,291.00	2	\$ 1,272,291.00	2	\$ 1,272,291.00
Medicare/Medicaid	Hospital	20	\$ 12,482,512.00	13	\$ 5,784,517.00	33	\$ 18,267,029.00	48	\$ 29,328,117.50
		600	\$ 24,765,014.00	173	\$ 8,391,309.00	773	\$ 33,156,323.00	1,200	\$ 49,862,117.31
Medicaid	EP	2,645	\$ 55,979,594.00	519	\$ 4,439,836.00	3,164	\$ 60,419,430.00	10,844	\$ 166,826,054.83
Medicaid	Hospital	2	\$ 4,580,960.77	1	\$ 1,409,960.42	3	\$ 5,990,921.19	4	\$ 7,041,615.67
Medicare/Medicaid	Hospital	63	\$ 67,450,147.31	49	\$ 42,655,578.49	112	\$ 110,105,725.80	211	\$ 246,371,539.82
		2,710	\$ 128,010,702.08	569	\$ 48,505,374.91	3,279	\$ 176,516,076.99	11,059	\$ 420,239,210.32
Medicaid	EP	1,231	\$ 26,031,256.00	735	\$ 6,360,838.00	1,966	\$ 32,392,094.00	5,387	\$ 80,015,039.37
Medicaid	Hospital	2	\$ 2,886,695.67	1	\$ 1,235,658.26	3	\$ 4,122,353.93	12	\$ 18,352,840.72
Medicare/Medicaid	Hospital	45	\$ 14,751,161.23	79	\$ 20,701,172.33	124	\$ 35,452,333.56	238	\$ 163,340,518.72
		1,278	\$ 43,669,112.90	815	\$ 28,297,668.59	2,093	\$ 71,966,781.49	5,637	\$ 261,708,398.81
Medicaid	EP	14,044	\$ 297,012,712.87	5,707	\$ 50,573,583.56	19,751	\$ 347,586,296.43	55,841	\$ 832,209,689.58
Medicaid	Hospital	12	\$ 29,043,517.08	8	\$ 15,162,338.78	20	\$ 44,205,855.86	127	\$ 189,749,718.25
Medicare/Medicaid	Hospital	243	\$ 350,509,171.68	254	\$ 186,735,665.72	497	\$ 537,244,837.40	885	\$ 1,071,428,868.23
		14,299	\$ 676,565,401.63	5,969	\$ 252,471,588.06	20,268	\$ 929,036,989.69	56,853	\$ 2,093,388,276.06
Medicaid	EP	1,956	\$ 41,189,601.00	516	\$ 4,352,007.00	2,472	\$ 45,541,608.00	9,953	\$ 145,095,676.22
Medicaid	Hospital	1	\$ 2,616,739.00	1	\$ 2,093,391.00	2	\$ 4,710,130.00	12	\$ 15,461,273.79
Medicare/Medicaid	Hospital	45	\$ 23,092,050.00	62	\$ 33,485,727.88	107	\$ 56,577,777.00	224	\$ 175,369,696.04
		2,002	\$ 66,898,390.00	579	\$ 39,931,125.00	2,581	\$ 106,829,515.00	10,189	\$ 335,926,646.05
Medicaid	EP	1,729	\$ 36,195,857.00	487	\$ 4,114,017.00	2,216	\$ 40,309,874.00	8,657	\$ 128,850,849.76
Medicaid	Hospital	1	\$ 2,129,616.96			1	\$ 2,129,616.96	3	\$ 3,963,997.96
Medicare/Medicaid	Hospital	18	\$ 15,184,969.77	41	\$ 18,415,634.67	59	\$ 33,600,604.44	109	\$ 132,363,586.20
		1,748	\$ 53,510,443.73	528	\$ 22,529,651.67	2,276	\$ 76,040,095.40	8,769	\$ 265,178,233.92

Medicaid EHR Incentive Program: Number of EPs Paid by Program Year

Source: 9/11/2014 MAPIR Super Extract

Report Generated 9/18/2014



Percentage of Core and Menu Measures by Eligible Providers								No. Eligible Professionals: 494		
Core	Description	Exclude	Data Qual	Comp/Met	Threshold%	Min%	Max%	Mean %	Std Dev%	
1	Use computerized provider order entry (CPOE) for medication orders directly entered by any licensed healthcare professional who can enter orders into the medical record per state, local, and professional guidelines.	65	8	421	30.00%	34.21%	100.00%	88.14%	12.48%	
2	Implement drug-drug and drug-allergy interaction checks.	0	7	487						
3	Maintain an up-to-date problem list of current and active diagnoses.	0	7	487	80.00%	80.07%	100.00%	97.41%	4.49%	
4	Generate and transmit permissible prescriptions electronically (eRx).	81	10	403	40.00%	40.43%	100.00%	89.05%	12.41%	
5	Maintain active medication list.	0	7	487	80.00%	80.56%	100.00%	96.11%	4.07%	
6	Maintain active medication allergy list.	0	7	487	80.00%	80.85%	100.00%	96.50%	4.32%	
7	Record all of the following demographics: (A) Preferred language; (B) Gender; (C) Race; (D) Ethnicity; (E) Date of birth	0	7	487	50.00%	50.77%	100.00%	93.19%	9.66%	
8	Record and chart changes in the following vital signs: (A) Height; (B) Weight; (C) Blood pressure; (D) Calculate and display body mass index (BMI); (E) Plot and display growth charts for children 2-20 years, including BMI	18	8	468	50.00%	50.44%	100.00%	88.80%	12.05%	
9	Record smoking status for patients 13 years old or older.	4	7	483	50.00%	43.59%	100.00%	88.77%	12.92%	
10	Report ambulatory clinical quality measures to CMS.	0	407	87						
11	Implement one clinical decision support rule relevant to specialty or high clinical priority along with the ability to track compliance with that rule.	0	7	487						
12	Provide patients with an electronic copy of their health information (including diagnostic test results, problem list, medication lists, medication allergies) upon request.	349	7	105	50.00%	51.16%	100.00%	96.06%	8.68%	
13	Provide clinical summaries for patients for each office visit.	1	9	486	50.00%	15.79%	100.00%	81.00%	16.22%	

N = 432 Eligible Professionals

Eligible Providers Completing Individual CQMs

<u>NQF</u>	<u>Measure</u>	<u>EPs</u>	<u>Percent</u>
<u>Core</u>			
0028	Preventive Care and Screening Measure Pair: a) Tobacco Use Assessment; b) Tobacco Cessation Intervention	356	82.4%
0421	Adult Weight Screening and Follow-Up	314	72.7%
0013	Hypertension: Blood Pressure Measurement	190	44%
<u>Alternate Core</u>			
0024	Weight Assessment and Counseling for Children and Adolescents	210	48.6%
0038	Childhood Immunization Status	139	32.2%
0041	Preventive Care and Screening : Influenza Immunization for Patients >= 50 Years Old	60	13.9%
<u>Additional</u>			
0036	Use of Appropriate Medications for Asthma	110	25.5%
0061	Diabetes: Blood Pressure Management	101	23.4%
0002	Appropriate Testing for Children with Pharyngitis	98	22.7%
0027	Smoking and Tobacco Use Cessation, Medical Assistance	90	20.8%
0032	Cervical Cancer Screening	76	17.6%
0031	Breast Cancer Screening	73	16.9%
0059	Diabetes: HbA1c Poor Control	71	16.4%
0018	Controlling High Blood Pressure	63	14.6%
0033	Chlamydia Screening for Women	61	14.1%

Direct Messaging

12

- A secure email in which messages are encrypted and can only be accessed by the intended recipient.
- Direct is a protocol for encrypted messaging that supports the secure electronic exchange of health information between trusted entities.
- It is HIPAA compliant.
- You do not need an electronic health record to be able to use Direct.
- At its simplest use - replaces the need to fax information.

Direct

13

- To accomplish secure exchange of messages containing Health Information, ONC started the Direct project in 2010. The aim of the direct project was to specify “...a simple, secure, scalable, standards-based way for participants to send authenticated, encrypted health information directly to known, trusted recipients over the (public) internet.”
- Costs range between \$6-15/per month/per mailbox.

Direct – XX@CTProviderDirect.org

14

- Through it's EHR incentive Program DSS is offering Direct mailboxes to eligible professionals and additional referral providers of their choice for one year at no cost.

Launched program
April 23, 2014

First Direct mail box assigned
May 1, 2014

First Direct messages sent
June 26, 2014

As of Sept. 16, 2014

of Providers = 28

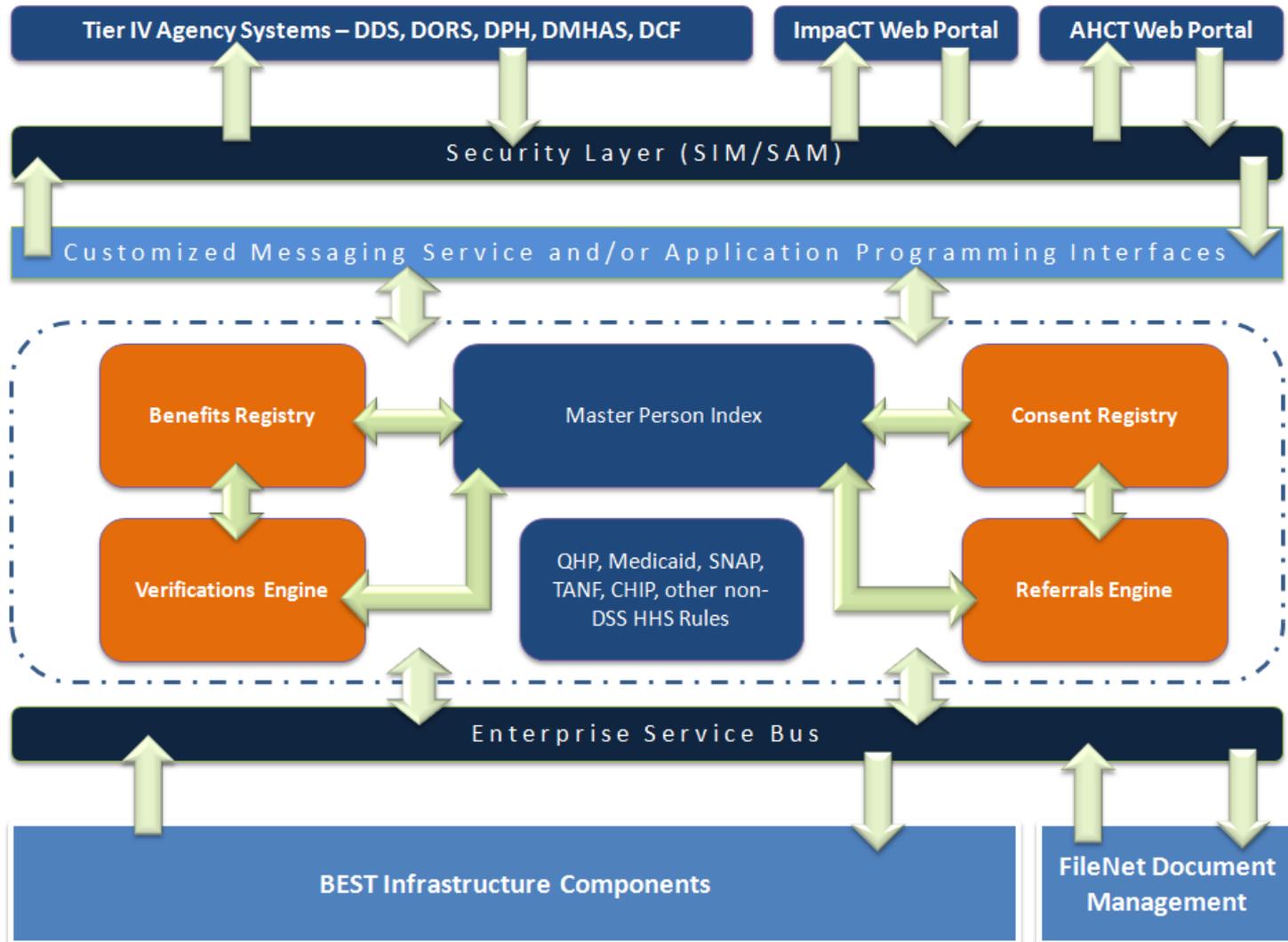
of Organizations = 25

of Direct Accounts = 30

of messages received = 128

of messages sent = 4

Envisioned Potential Tier IV Architecture (source - KPMG presentation on 4/25/2014)

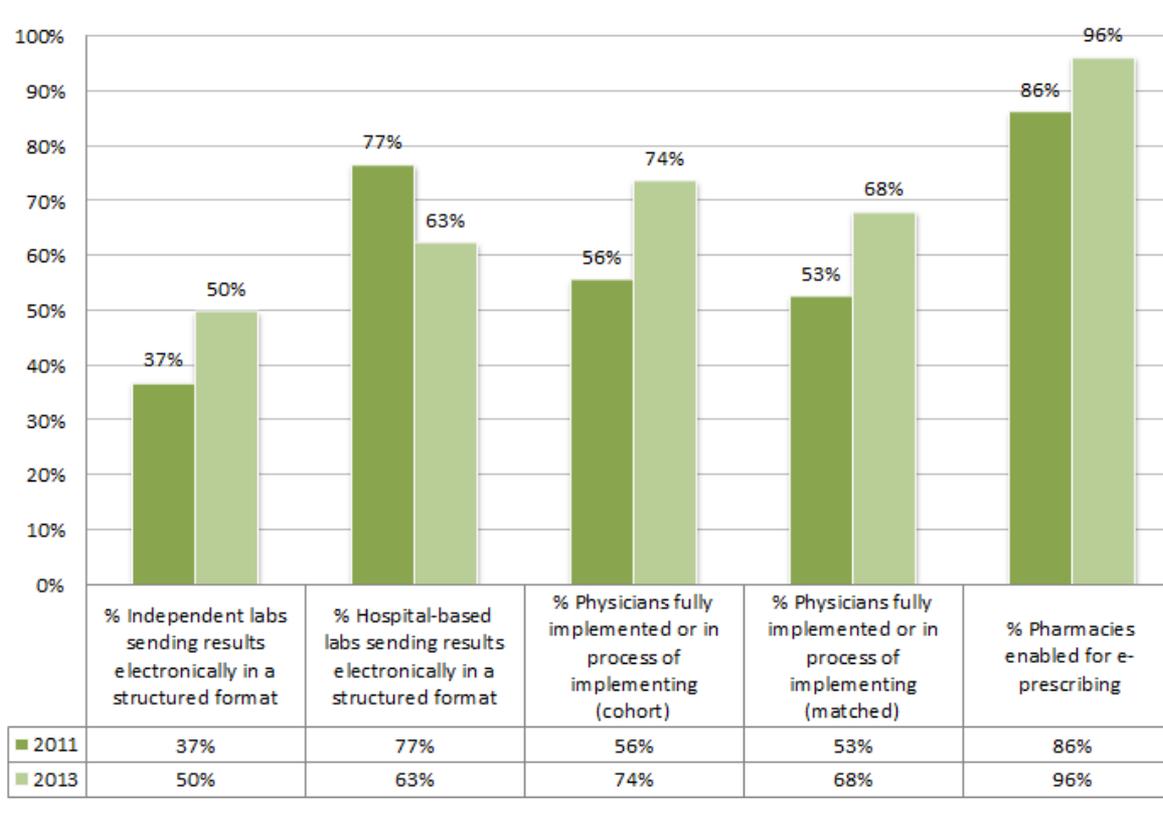


16

Current HIT Landscape

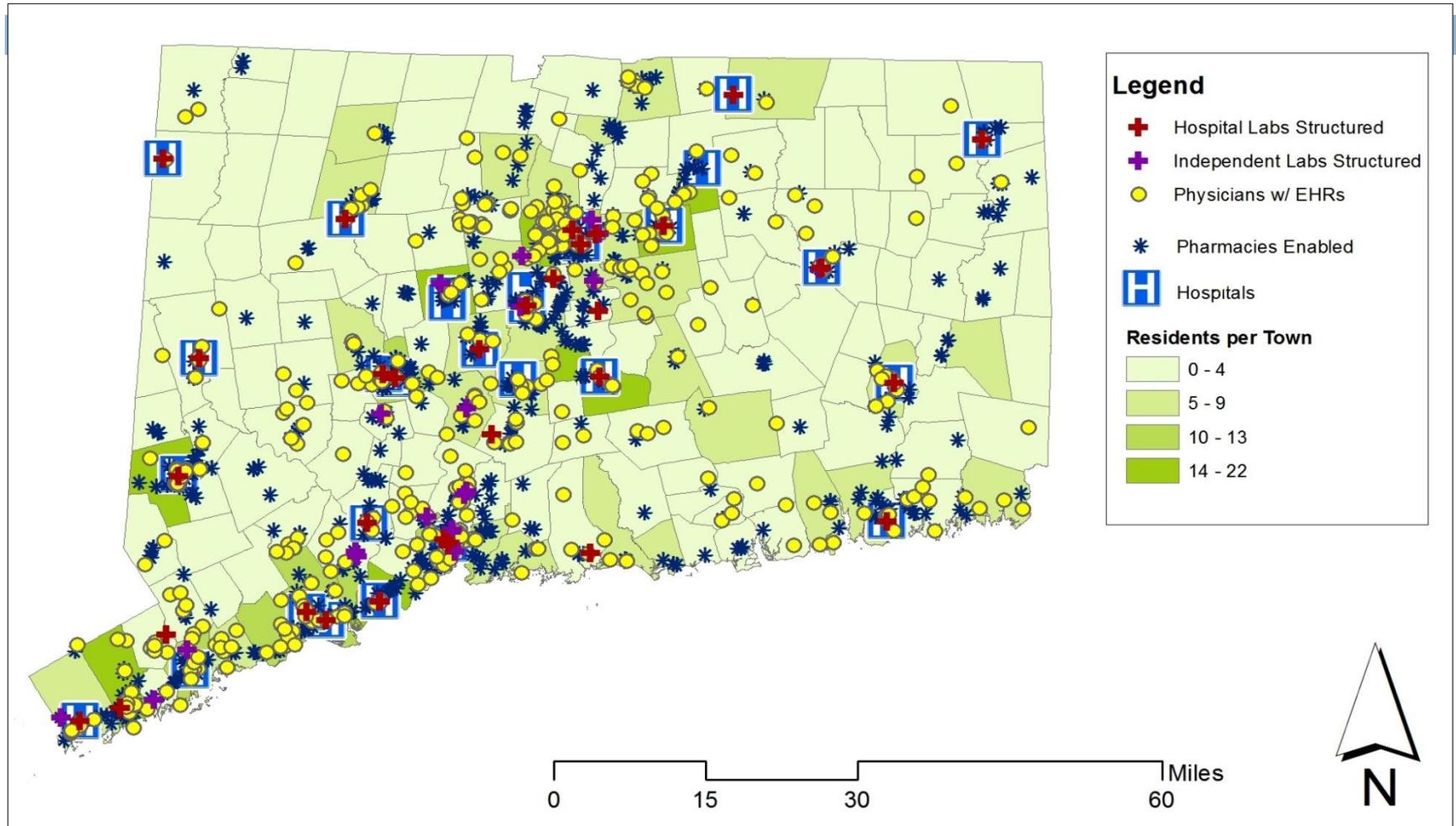
Electronic capabilities of labs, physicians, and pharmacies

17



HIT Enabled

18



19

Proposed HIT Initiatives & Projects

Proposed initiatives

20

- HIT Governance Structure
- Consent Registry
- Disease Registries
- eCQMs reporting engine using edge servers
- Alert/Notification Engine
- Personal Health Record

HIT Governance

21

- Starting on October 15, 2014 a set of six-planning meetings with a focus on the following:
 - ▣ Create a HIT vision statement for our state
 - ▣ Identify common HIT goals
 - ▣ Identify and support an enterprise built on an interoperability framework
 - ▣ Operationalize across-agency governance structure that builds upon and ties the various initiatives that have been undertaken in the last 4-years with respect to health and human services.

22

Questions